

ALJ/BRC/jt2

Date of Issuance 6/7/2018

Decision 18-05-024 May 31, 2018

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric
Company (U902E) for Approval of the
Results from its 2016 Track IV Local
Capacity Requirement Preferred Resources
Requests for Offers.

Application 17-04-017

**DECISION APPROVING THE RESULTS OF SAN DIEGO GAS & ELECTRIC
COMPANY'S 2016 TRACK IV LOCAL CAPACITY REQUIREMENT
PREFERRED RESOURCES PROCUREMENT**

Table of Contents

| Title | Page |
|---|------|
| DECISION APPROVING THE RESULTS OF SAN DIEGO GAS & ELECTRIC COMPANY'S 2016 TRACK IV LOCAL CAPACITY REQUIREMENT PREFERRED RESOURCES PROCUREMENT | 1 |
| Summary | 2 |
| 1. Factual Background..... | 2 |
| 2. Procedural Background | 5 |
| 3. Issues Before the Commission | 6 |
| 4. Discussion and Analysis..... | 7 |
| 4.1. Overview of the Six Contracts | 7 |
| 4.2. The Reasonableness of SDG&E's RFO and the Corresponding Conduct of SDG&E During the RFO | 9 |
| 4.3. SDG&E's Selected Resources and Conduct Consistency with SDG&E's Track IV Decision | 12 |
| 4.4. SDG&E's Selected Resources and Conduct Consistency With the Energy Storage Decision and Public Utilities Code Section 2836.6 | 14 |
| 4.5. The Reasonableness of the Price and Terms of the Contracts | 16 |
| 4.5.1. Energy Storage | 17 |
| 4.5.2. Demand Response | 18 |
| 4.6. The Contracts and Projects are in the Public Interest | 19 |
| 4.7. Cost Recovery | 20 |
| 5. Categorization and Need for Hearing..... | 22 |
| 6. Comments on Proposed Decision | 22 |
| 7. Assignment of Proceeding | 22 |
| 8. Request to File Under Seal | 23 |
| Findings of Fact..... | 23 |
| Conclusions of Law | 26 |
| ORDER | 27 |

**DECISION APPROVING THE RESULTS OF SAN DIEGO GAS & ELECTRIC
COMPANY'S 2016 TRACK IV LOCAL CAPACITY REQUIREMENT
PREFERRED RESOURCES PROCUREMENT**

Summary

This decision approves full cost recovery of six contracts, providing 88 megawatts (MW) of local capacity, that resulted from San Diego Gas & Electric's (SDG&E) 2016 Track IV Preferred Resources Local Capacity Requirements Request for Offers. Specifically, this decision approves three third-party energy storage resources (total 13.5 MW), two utility-owned energy storage resources (total 70 MW), and one demand response resource (total 4.5 MW). This decision authorizes SDG&E to count no more than 38.85 MW of utility owned storage and 13.5 MW of third-party-owned storage towards its Assembly Bill 2514 energy storage target as determined in Decision 13-10-040. This decision authorizes cost recovery, in rates, of approximately \$235 million, with a reduction due to the timing of the demand response program authorization. This decision grants SDG&E's requested mechanisms for cost recovery.

This proceeding is closed.

1. Factual Background

The early retirement of San Onofre Nuclear Generating Station (SONGS) left San Diego Gas & Electric Company's (SDG&E) service territory with a need for local resource capacity.¹ Decision (D.)14-03-004 (Track IV Decision) authorized SDG&E to procure a total of 500-800 megawatts (MW) of capacity by

¹ Decision (D.) 14-03-004 at 22.

the end of 2021 to meet this in-basin need.² That decision required SDG&E to procure at least 25 MW of capacity from energy storage resources and, consistent with the Loading Order of the Energy Action Plan,³ to procure at least 175 MW of capacity from preferred resources or energy storage.⁴

With regard to Track IV Decision procurement progress, D.15-05-051 (Carlsbad Decision) conditionally approved SDG&E's application for local capacity from a power purchase and tolling agreement (PPTA) with Carlsbad Energy Center, LLC. The Commission's conditions on that procurement authorization required the submittal of an amended PPTA, for 500 MW of capacity instead of the original 600 MW request, and stated that "[a]ll of the 100 MW in residual procurement authority ... must consist of preferred resources or energy storage."⁵ The Carlsbad Decision did not increase the minimum requirement of 175 MW for preferred resources or energy storage from the Track IV Decision authorization but simply clarified that the remaining procurement authority resulting from the reduction of the Carlsbad PPTA be limited to the procurement of preferred resources or energy storage.

In addition to the Carlsbad PPTA, SDG&E received Commission approval for several projects that provide in-basin capacity. In August 2016, the Commission approved 37.5 MW of energy storage resources procured in response to Resolution E-4791 to count toward SDG&E's local capacity and

² D.14-03-004 at Ordering Paragraph (OP) 2.

³ Energy Action Plan II at 2.

⁴ D.14-03-004 at OP 2.

⁵ D.15-05-051 at 2.

energy storage requirement. In December 2016, the Commission approved an 18.5 MW Energy Efficiency contract resulting from SDG&E's 2014 All Source Request for Offers (RFO).

In a separate process from the Track IV Decision, the Commission issued D.13-10-040 (the Energy Storage Decision) in response to Assembly Bill (AB) 2514, setting SDG&E's energy storage procurement target at 165 MW.⁶ The Energy Storage Decision instructs the three major electric investor-owned utilities (IOU) to consider all forms of resource ownership (utility owned, third-party owned, customer-owned and joint ownership). In SDG&E's approved Track IV Procurement Plan, SDG&E stated that it would consider energy storage procured in response to the Track IV Decision toward both local capacity requirements and SDG&E's energy storage mandate.⁷

We take official notice that in A.18-02-016, in the Application of SDG&E and table DB-2 in the testimony of Don Balfour, SDG&E indicates the Commission authorized it to count towards its AB 2514 target a total of 43.65 MW of utility-owned energy storage capacity and 56.96 MW of third-party owned energy storage capacity. SDG&E's storage procurement target resulting from AB 2514 and the Energy Storage Decision is 165 MW.

This application seeks approval of an additional six resources that will provide 88 MW of energy storage and demand response in furtherance of SDG&E's Track IV Decision requirement and its AB 2514 target.

⁶ D.13-10-040 at 15-16.

⁷ Exhibit SDGE-2 at Attachment D.

2. Procedural Background

SDG&E issued its 2016 Preferred Resources Local Capacity Requirements RFO (Preferred Resources LCR RFO or RFO) on February 26, 2016, seeking local capacity requirement resource with the following product types: energy efficiency, demand response, renewable resources, distributed generation, and energy storage. As authorized in the Track IV Decision, SDG&E sought up to 140 MW in the solicitation.⁸

On April 19, 2017, SDG&E filed Application (A.)17-04-017, seeking approval of six contracts that resulted from SDG&E's 2016 Preferred Resources LCR RFO and requests that the energy storage resources count towards its AB 2514 energy storage target. SDG&E seeks approval for three third-party energy storage resources, two utility-owned energy storage resources, and one demand response resource. SDG&E also seeks full recovery in rates of approximately \$235 million representing the costs of the six contracts over their respective contract terms (excluding franchise fees and uncollectibles).

On May 30, 2017, the Office of Ratepayer Advocates (ORA) timely filed a protest to the application. ORA's protest identified a list of issues that the Commission should consider in determining whether to grant the relief requested in the application.

A prehearing conference (PHC) was set by a ruling dated August 29, 2017 and the parties were directed to meet and confer prior to the PHC to resolve, to the extent possible, conflicts in proposed schedules and other procedural

⁸ Exhibit SDGE-3 at 1.

matters. On September 8, 2017, the PHC was held to determine parties, discuss the scope, the schedule, and other procedural matters.

ORA was the only party to serve testimony on October 20, 2017. SDG&E served rebuttal testimony on October 30, 2017. No hearings were held.

Testimony was identified and received into evidence on January 4, 2018 via an Administrative Law Judge (ALJ) ruling. Opening briefs were filed by ORA and SDG&E on January 5, 2018. Reply briefs were filed by ORA and SDG&E on January 19, 2018. The matter was submitted on January 19, 2018.

3. Issues Before the Commission

There were two major issues set forth in the scoping memo: the approval of the contracts as requested in the Application, and the granting of full cost recovery as requested in the Application. Those issues are described in more detail below.

1. Should the Commission approve the six contracts and projects resulting from the 2016 Preferred Resources LCR RFO?
 - a. Was the 2016 Preferred Resources LCR RFO and SDG&E's conduct with respect to the RFO reasonable?
 - b. Are these resources and SDG&E's conduct in procuring these resources consistent with prior Commission decisions, including but not limited to, D.14-03-004 and D.13-10-040?
 - c. Are these resources and SDG&E's conduct in procuring these resources consistent with Track IV Preferred Resources Procurement Plan as approved by the Director of the Commission's Energy Division on July 22, 2014?
 - d. Are these resources consistent with the statutory requirements concerning energy storage systems set forth in Public Utilities Code § 2835 et seq.?
 - e. Are the prices and terms of the six contracts just and reasonable?

- f. Is approval of the contracts and projects in the public interest?
2. Should the Commission grant full cost recovery of the six contracts in rates, as requested by SDG&E?

The issues of contract and cost recovery reasonableness were addressed by SDG&E and ORA in briefs. ORA raised concerns with the reasonableness of the engineering procurement contract (EPC) with RES Americas Construction.

Additionally, consideration of safety issues was scoped into the proceeding.

4. Discussion and Analysis

SDG&E seeks approval for three third-party energy storage resources, two utility-owned energy storage resources, and one demand response resource that resulted from an RFO that it released in February 2016. As a part of this request, SDG&E seeks cost recovery of approximately \$235 million representing the costs of the six contracts over their respective contract terms (excluding franchise fees and uncollectibles). SDG&E seeks to count the energy storage resources towards its AB 2514 energy storage target as determined in D.13-10-040. SDG&E seeks to recover costs for the five energy storage contracts with cost allocation mechanism (CAM) treatment and the costs associated with the demand response contract through the Amortization for Advanced Metering and Demand Response Memorandum Account.

4.1. Overview of the Six Contracts

SDG&E seeks approval for three third-party PPTAs for energy storage. A project with Enel Green Power North America is for a 15-year contract for 3 MW of capacity and an online date of December 31, 2021. A project with Advanced Microgrid Solutions is for a 20-year contract for 4 MW of capacity and an online date of December 1, 2019. A project with Powin Energy is for a 10-year contract

for 6.5 MW of capacity and an online date of June 30, 2021. The battery technology utilized in all three PPTA projects is lithium ion. The third party PPTAs require a discharge duration of four hours and provide distribution domain services.

No party contested SDG&E's proposed third-party energy storage resource PPTAs.

Further, SDG&E seeks approval for two utility owned storage projects. A project developed by AES Corporation⁹ (AES) is called the Fallbrook Battery Energy Storage System (Fallbrook BESS) and will provide 40 MW of capacity utilizing lithium ion technology with a discharge duration of four hours. SDG&E proposes the Fallbrook BESS project as a build-own-transfer (BOT) contract with an expected online date of March 31, 2021. This project provides transmission domain services.

A project developed by RES Americas Construction (RES) is called the Miramar Battery Energy Storage System (Miramar BESS) and will provide 30 MW of capacity utilizing lithium ion technology with a discharge duration of four hours. SDG&E proposes the Miramar BESS project as an EPC with an expected online date of December 31, 2019. This project provides transmission domain services.

No party contested SDG&E's proposed BOT contract for the Fallbrook BESS. ORA contested SDG&E's proposed EPC for the Miramar BESS.

Further, SDG&E seeks approval for one demand response contract. The OhmConnect demand response project will provide 4.5 MW of capacity with a,

⁹ AES Corporation is formally known as Applied Energy Services.

proposed, five-year term beginning January 1, 2018 and will end December 31, 2022. The start date proposed for the demand response project is prior to the effective date of this decision.

No party contested SDG&E's proposed demand response project contract with OhmConnect.

4.2. The Reasonableness of SDG&E's RFO and the Corresponding Conduct of SDG&E During the RFO

SDG&E asserts that it utilized an evaluation methodology that considered all resource types in the 2016 Preferred Resources LCR RFO on a level playing field consistent with evaluation protocols and agnostic to ownership of the resources.¹⁰ SDG&E's position is that it used a least-cost, best-fit methodology to value and award contracts. Offers were submitted by both third-parties and utility owned projects. SDG&E testimony indicates it followed a code of conduct that governed the activities and communication between the bid evaluation team members and the team that was proposing the projects for the utility.

In evaluating the RFO response, SDG&E testifies that it ensured conformance with the solicitation requirements, including safety. SDG&E further contends it conducted a quantitative evaluation that involved a net market value (NMV) analysis that provided a net present value of the forecasted value streams and costs.

¹⁰ Exhibit SDGE-4 at 1.

SDG&E additionally asserts it conducted a series of meetings with internal stakeholders and the independent evaluator (IE) to identify and consider the qualitative aspects of the offers ranked by NMV.

In determining the final short list, SDG&E testimony explains it worked with the IE to identify the necessary qualitative considerations. Those qualitative factors included a safety plan for construction and operation of the facilities, developer experience, development milestones, consideration of the flexibility of the capacity resources, diverse business enterprise status, permitting and interconnection, and water system impacts.¹¹

SDG&E contends locational benefits were considered while developing the evaluation methodology and that SDG&E received locational effectiveness factors study from the California Independent System Operator (CAISO) which attempted to differentiate the locational effectiveness of the resources.

SDG&E consulted with the procurement review group to ensure appropriate stakeholder input was considered.¹² In the procurement review group, the discussion emphasized the shortlisting objectives:

- Continued progress in meeting the Track IV reliability needs
- Continued progress towards energy storage mandated targets
- Procurement of diverse resources from a diverse supplier source
- Procurement of a diverse set of contract tenors
- Optimization of timing to benefit from market and technology development

¹¹ Exhibit SDGE-4 at 2.

¹² Exhibit SDGE-2 at 34.

The evaluation process for utility-owned energy resources appears to have been conducted in a fair and consistent manner to ensure that viable projects were selected. SDG&E asserts that the economic assessments were evaluated without regard to the project ownership to ensure the RFO process in its entirety was conducted in a fair and consistent manner, and SDG&E relied on oversight of the IE, the procurement review group, and a code of conduct.

This is confirmed in the IE report in chapter 7, Merit of Contract Approval.¹³

SDG&E negotiated and signed a total six contracts through this RFO process. These contracts will provide 4.5 MW of demand response and 83.5 MW of energy storage with 13.5 MW of PPAs and 70 MW of utility-owned storage.

Through the bid evaluation and selection process, PA¹⁴ believes that SDG&E selected appropriate offers. PA is not opining on the appropriate level of UOG ownership which is a public policy issue. The determination of revenue requirements is also a public policy issue, and one in which CPUC staff have expertise; for our part we accept that SDG&E's contract-specific revenue requirements model correctly represents the revenue requirement impact of the UOG bids.

Based on the analysis and assumptions described throughout this report PA recommends approval of these contracts.

We accept the determination from the IE that SDG&E selected the appropriate offers. We ultimately deem SDG&E's conduct and RFO to be

¹³ Exhibit SDGE-2 Attachment J at 32.

¹⁴ PA Consulting Group (PA), formerly known as Personnel Administration, is the independent evaluator for this procurement process.

reasonable and approve the contracts with this assurance from the IE as a key aspect our consideration.

4.3. SDG&E's Selected Resources and Conduct Consistency with SDG&E's Track IV Decision

On February 26, 2016, SDG&E released its 2016 Preferred Resources LCR RFO, targeting up to 140 MW across five different product types: energy efficiency, demand response, energy storage, renewable power and distributed generation. This RFO was conducted as a result of the Track IV Decision that resulted from the 2012 Long Term Procurement Plan proceeding. In response to the San Diego local sub-area capacity need detailed in the Track IV Decision and D.15-05-051, the Carlsbad Decision, SDG&E continued to pursue local preferred resource capacity.

The Track IV Decision prescribed requirements for SDG&E's procurement, including timing (resources must be online by 2022), procurement plan approval, involvement of the CAISO, and requirements from D.13-02-015. SDG&E's testimony indicates it incorporated these requirements into its RFO instructions documents.

The Carlsbad Decision stated that the residual 100 MW of procurement authority must consist of energy storage or preferred resources. Based on this guidance, SDG&E contends it adjusted the Track IV Decision procurement authorization that resulted in this RFO.

The Track IV Decision also required SDG&E to receive approval from Energy Division of a Preferred Resources Procurement Plan prior to conducting the solicitation. The Preferred Resources Procurement Plan was admitted into evidence in Attachment D of Exhibit SDGE-2 and the letter of approval from the Energy Division Director is admitted as Attachment F of Exhibit SDGE-2. The

Preferred Resources Procurement Plan outlined SDG&E's strategy for procuring preferred resources resulting from the need of the Track IV Decision. It included information on how SDG&E proposed determining the product volume, location, terms, timing, and procurement processes. After a request for modification, SDG&E submitted a version of the Preferred Resources Procurement Plan on July 18, 2014 that was approved by Energy Division on July 22, 2014.¹⁵

In its testimony, ORA requested information and raised concern on the indication that SDG&E may have limited its 2016 Preferred Resources RFO only to lithium ion based batteries. ORA indicated this was not consistent with the direction in D.14-03-004.

ORA withdrew this concern in its reply brief. SDG&E explained that the RFO was not limited to only lithium ion batteries for storage projects and rather was open to all preferred resources and storage technologies as required by D.14-03-004. Of the energy storage bids received, SDG&E contends that the top ranking bids were lithium ion projects that provided the superior economic value, and that was the reason SDG&E selected those bids.

We agree that SDG&E's RFO and resource selection is consistent with the Track IV Decision.

¹⁵ Exhibit SDGE-2 at Appendix F.

**4.4. SDG&E's Selected Resources and Conduct
Consistency With the Energy Storage
Decision and Public Utilities Code
Section 2836.6**

SDG&E's testimony asserts that the 2016 Preferred Resources RFO and selected resources are consistent with the Energy Storage Decision.

In A.18-02-016 and the accompanying testimony of Don Balfour, SDG&E indicates it has been authorized to count 43.65 MW of utility owned energy storage capacity and 56.96 MW of third-party owned storage capacity towards its AB 2514 energy storage target¹⁶. SDG&E's total storage procurement target resulting from AB 2514 and the Energy Storage Decision is 165 MW.¹⁷

In this Application, SDG&E is requesting approval of 70 MW of additional utility owned energy storage and 13.5 MW of third party owned energy storage PPTAs.

The Energy Storage Decision set requirements regarding how much utility owned storage may count towards the AB 2514 target. "[W]e find that the utility ownership of storage projects should not exceed 50 percent of all storage across all three grid domains at this time. In other words, utilities may own no more than half of all of the storage projects they propose to count toward the MW target, regardless of whether it is interconnected at the transmission or distribution level, or on the customer side of the meter. We believe that setting this limit will ensure that any viable market options are not preempted."¹⁸

¹⁶ A.18-02-016 Testimony of Don Balfour at Table DB-2.

¹⁷ D.13-10-040 at 51

¹⁸ D.13-10-040 at 51.

The Energy Storage decision states that “each IOU may procure utility-owned storage resources only up to 50 percent of the cumulative procurement targets [as determined in D.13-10-040 for each IOU] across all three grid domains.”¹⁹ Therefore, SDG&E may only count utility-owned storage resources for a maximum of 50% of its 165 MW procurement target, or 82.5 MW, towards its AB 2514 energy storage target.

Prior to this decision, SDG&E was authorized to count 43.65 MW of utility owned projects towards its AB 2514 energy storage target.²⁰ It may only count an additional 38.85 MW of utility owned energy storage to reach the maximum of 82.5 MW (half of its 165 MW target) of utility owned energy storage. We find that the entirety of the 30 MW Miramar BESS project and only 8.85 MW of Fallbrook BESS are eligible to count towards SDG&E’s AB 2514 energy storage target.

Further, SDG&E may count the entirety of the 13.5 MW of third party PPTA projects approved in this decision towards its AB 2514 energy storage target.

ORA raised concern that the Miramar BESS project does not meet the necessary burden of proof to comply with the provision of Public Utilities Code Section 2836.6 that indicates that “All procurement of energy storage systems by a load-serving entity . . . shall be cost effective.”²¹ ORA additionally presented

¹⁹ D.13-10-040 at 6.

²⁰ A.18-02-016 at 18.

²¹ ORA Opening Brief at 3.

evidence that it suggests that SDG&E should not procure the Miramar BESS resource now in order to take advantage of future declining battery prices.

SDG&E indicated in its reply briefs that ORA does not challenge the evidence that the Miramar BESS project has a positive NMV. The NMV calculation takes into account the 2019 online date and finds that the NMV is positive. We agree that the Miramar BESS project, with a positive NMV, is cost effective, does not conflict with Public Utilities Code Section 2836.6, and meets the necessary burden of proof. Further, neither the Track IV Decision nor SDG&E's Preferred Resources Procurement Plan, which was approved by Commission staff, prohibited projects with an online date prior to 2021. SDG&E also explains that it is not prudent to postpone procurement for the remaining resources needed in 2021 so that all the energy storage resources come online at the very end, because some projects may drop out, or face unexpected delays, leaving insufficient time to procure replacement resources. This approach is reasonable.

4.5. The Reasonableness of the Price and Terms of the Contracts

SDG&E asserts that the six contracts meet the safety and local reliability conformance requirements and represent the least-cost, best-fit solutions with positive NMV determinations.²²

SDG&E indicates it also considered qualitative factors that include the safety plan for construction and operation of the facilities, developer experience,

²² Exhibit SDGE-1 at 6.

development milestones, the consideration of flexible resources, diverse business enterprise status, permitting and interconnection, and water usage.²³

4.5.1. Energy Storage

SDG&E asserts that the prices and terms of the five energy storage contracts are just and reasonable. SDG&E indicates that it outlined general conformance requirements that adhered to Commission direction and State law, for both the utility owned and third party owned contracts. Those conformance requirements included location within the needed local area, the ability to receive resource adequacy credit for the projects, being demonstrably incremental beyond existing resources, and a delivery term that matched the need.²⁴

SDG&E indicates it also considered qualitative factors that include the safety plan for construction and operation of the facilities, developer experience, development milestones, and the consideration of flexible resources.

SDG&E asserts that the five energy storage projects the conformance requirements and represent the least-cost, best-fit solutions according to the NMV determination.²⁵ The five energy storage contracts SDG&E proposed in this application all resulted in positive NMV.

We agree with SDG&E that the price and terms of the five energy storage contracts are just, reasonable, and cost effective.

²³ Exhibit SDGE-4 at 2.

²⁴ Exhibit SDGE-2 at 29.

²⁵ Exhibit SDGE-1 at 6.

4.5.2. Demand Response

SDG&E included in its testimony the specific conformance requirements it set forth in the 2016 Preferred Resources RFO for all demand response resource bids. Those conformance requirements included being location in SDG&E's service territory, delivering at a date that meets need, conforming with RA rules, meeting the CAISO's 20-minute response time requirement, being demonstrably incremental beyond existing resources, having the ability to bid into CAISO's wholesale markets, meeting a minimum of 500 kW in aggregate capacity, meeting the Commission's policy on prohibited resources, and being dispatched by the CAISO or SDG&E.²⁶ Additionally, the NMV of the contract with OhmConnect is positive.

The OhmConnect contract will provide a supply side resource that will be integrated into the CAISO wholesale market and available for dispatch by the CAISO and SDG&E.²⁷ SDG&E notes that the demand response resource procured through this contract with OhmConnect is cost effective and competitive with the Demand Response Auction Mechanism.²⁸

Because Commission approval did not occur by January 1, 2018, it is apparent that OhmConnect will not begin delivering on this timeframe; the contract must take into account the changed online date. The end date of the contract, as specified in the Application, of December 31, 2022 will not be adjusted due to the delay in Commission approval. Therefore, the value of the

²⁶ Exhibit SDGE-2 at 30-31.

²⁷ Exhibit SDGE-3 at 7.

²⁸ Exhibit SDGE-3 at 8.

contract must be reduced commensurately with the shortening of the contract due to an effective date after the proposed January 1, 2018.

With a pro rata reduction in cost recovery allowance due to the program starting later than the proposed January 1, 2018 start date, we find that the price and terms of the demand response contract with OhnConnect is just, reasonable, and cost effective.

4.6. The Contracts and Projects are in the Public Interest

With a local capacity need determination in the Track IV Decision and a Commission mandate in the Energy Storage Decision, SDG&E asserts it sought to procure resources that would balance the objectives of its ratepayers, including cost, environmental impact, and system reliability.

SDG&E's testimony indicates that in addition to meeting conformance requirements, including safety and least-cost-best-fit criteria, SDG&E considered multiple objectives in shortlisting resources from the 2016 Preferred Resources RFO, including:

- continuing progress in meeting Track IV reliability needs;
- continuing progress in meeting energy storage procurement targets;
- mitigating portfolio risk by procuring a diverse mix of resources from a diverse set of suppliers;
- mitigating market and technology risk by procuring a diverse mix of contract tenors; and

- optimizing timing to benefit from market and technology development.²⁹

SDG&E indicates the six selected resources successfully meet the requirements and shortlisting objectives outlined above. All six resources met the safety and local reliability conformance requirements and represent least-cost-best-fit solutions according to SDG&E's NMV analysis.

In total, the six resources provide 88 MW of in-basin capacity, comprised of energy storage and demand response resources that will allow for the integration of increased levels of renewables.

SDG&E explains the resources also bring diversity to its portfolio, reducing exposure to resource seasonality, plant outages, counterparty risk, project failure and technology development affecting future prices. Among resources selected, six different counterparties are represented, three different energy storage product types are included, two different resource types are procured, and contract terms range from 5 years to 20 years. Among utility owned energy storage projects, SDG&E also selected resources that provide diversity in development responsibilities and risk. Finally, two selected resources are with Diverse Business Enterprises.³⁰

The contracts and projects are in the public interest.

4.7. Cost Recovery

The Commission grants cost recovery for the five energy storage contracts and the demand response contract. The cost recovery for the demand response

²⁹ Exhibit SDGE-1 at 6.

³⁰ Exhibit SDGE-1 at 8.

contract with OhmConnect is reduced proportionally for the number of days the contract is not able to perform prior to Commission's approved effective date of this decision.

The Track IV Decision speaks to the cost recovery mechanism for the resources that result from the 2016 Preferred Resources RFO:

We find that the procurement authorized in this decision is for the purpose of ensuring local reliability in the SONGS service area, for the benefit of all utility distribution customers in that area. We conclude that such procurement meets the criteria of Section 365.1(c)(2)(A)-(B). Therefore, SCE and SDG&E shall allocate costs incurred as a result of procurement authorized in this decision, and approved by the Commission. In most cases we expect this allocation to be consistent with D.13-02-015 and the CAM adopted in D.06-07-029, D.07-09-044, D.08-09-012 and D.11-05-005, but there may be resources where an existing alternative method of allocating resources costs may be preferred; for example, cost may be recoverable through the Energy Program Investment Charge.³¹

SDG&E proposes to recover the costs of the energy storage resources with CAM treatment.

For the demand response resource, SDG&E proposes to recover the costs through the distribution component consistent with other demand response costs. SDG&E proposes the costs of the demand response resource will be recovered through the Amortization for Advanced Metering and Demand Response Memorandum Account and be addressed future Annual Electric Regulatory Account Update Advice Letters.

³¹ D.14-03-004 at 120.

We authorize SDG&E's requested cost allocation methodology treatment for the energy storage contracts due to the direction provided in the Track IV Decision.

Regarding SDG&E's requested cost recovery treatment for the demand response contract, we find this to be the appropriate mechanism to recover the costs for the contract with OhmConnect.

5. Categorization and Need for Hearing

In Resolution ALJ 176-3397 dated May 11, 2017, the Commission preliminarily categorized this application as ratesetting as defined in Rule 1.3(e) and determined that this proceeding requires evidentiary hearings. Parties did not oppose the preliminary categorization but stated at the PHC that hearings may be necessary and so the schedule included the possibility of hearings. It was later determined that there were not material facts in dispute that would require evidentiary hearings, and no evidentiary hearings were held.

Based on the record, we affirm that the categorization for this proceeding is ratesetting and find that hearings are not necessary.

6. Comments on Proposed Decision

The proposed decision of ALJ Stevens in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on May 15, 2018 by the Office of Ratepayer Advocates. Minor edits have been made throughout the decision to clarify the intent of the Proposed Decision.

7. Assignment of Proceeding

Michael Picker is the assigned Commissioner and Brian Stevens is the assigned ALJ in this proceeding.

8. Request to File Under Seal

Pursuant to Rule 11.4 of the Commission's Rules of Practice and Procedure, ORA submitted a motion for leave to file under seal a confidential version of its Opening Brief and Reply Brief. ORA claims its Opening Brief and Reply Brief contain multiple references to material that SDG&E claims are confidential pursuant to D.06-06-066. We grant this request.

Pursuant to Rule 11.4 of the Commission's Rules of Practice and Procedure, SDG&E submitted a motion for leave to file under seal a confidential version of its Opening Brief. SDG&E claims its Opening Brief contains multiple references to material that are confidential pursuant to D.06-06-066. We grant this request.

Findings of Fact

1. The early retirement of SONGS left SDG&E's service territory with a need for local reliability capacity.
2. D.14-03-004 required SDG&E to procure at least 25 MW of local capacity from energy storage resources and at least 175 MW of local capacity from preferred resources or energy storage.
3. SDG&E has a residual need of 144 MW of preferred resources or energy storage resulting from D.14-03-004.
4. The 2016 Preferred Resources LCR RFO was conducted and the results are consistent with D.14-03-004.
5. D.13-10-040, in response to AB 2514, mandated SDG&E to procure 165 MW of cost effective energy storage.
6. D.13-10-040 mandated that SDG&E may procure no more than 50% of its AB 2514 mandated procurement, or 82.5 MW, from utility owned resources.

7. The Commission has previously authorized SDG&E to count a total of 43.65 MW of utility owned energy storage capacity towards its AB 2514 target and 56.96 MW of third-party owned energy storage capacity.

8. SDG&E may procure energy storage resources that count for both the D.14-03-004 local capacity requirements and the AB 2514 mandate in D.13-10-040.

9. SDG&E seeks approval for three third-party power purchase and tolling agreements for distribution domain energy storage services with Enel Green Power North America, Advanced Microgrid Solutions, and Powin Energy, totaling 13.5 MW of capacity that resulted from its 2016 RFOs.

10. SDG&E seeks approval for two utility-owned energy storage contracts providing transmission domain services, with RES Americas Construction and AES Corporation, totaling 70 MW of capacity that resulted from its 2016 RFOs.

11. SDG&E seeks approval for a demand response contract with OhmConnect totaling 4.5 MW that resulted from its 2016 RFOs.

12. The proposed delivery date for the demand response contract with OhmConnect is January 1, 2018, prior to the effective date of this decision.

13. SDG&E followed a code of conduct that governed the activities and communication between the bid evaluation team and members of the team that were proposing projects for the utility.

14. SDG&E adhered to a least cost, best fit evaluation methodology for the results of the request for offers that considered qualitative and quantitative factors, including a net market value analysis of forecasted cost and value streams.

15. SDG&E conducted a series of meetings with internal stakeholders and the independent evaluator to identify and consider the qualitative aspects of the offers.

16. The qualitative factors SDG&E considered included the safety plan for construction and operation of the facilities, developer experience, development milestones, consideration of the flexibility of the capacity resources, diverse business enterprise status, permitting and interconnection, and water system impacts.

17. SDG&E considered the locational benefits of the awarded contracts by engaging with the CAISO to incorporate its locational effectiveness study of the differentiated resources into the evaluation.

18. SDG&E consulted with the procurement review group to ensure appropriate stakeholder and Commission input was considered.

19. SDG&E conducted an economic assessment of the responses to the request for offers without regard to project ownership to ensure the process was conducted in a fair and consistent manner with oversight from the independent evaluator.

20. Based on its analysis and assumptions, the independent evaluator recommended approval of the contracts.

21. The request for offers did not limit the energy storage bids to a specific technology.

22. The bids that SDG&E received for lithium ion technology projects tended to have the superior economic value.

23. All five energy storage contracts provide resources that have a 4-hour dispatch and comply with the resource adequacy requirements of the Commission and the CAISO.

24. The contract with OhmConnect complies with the resource adequacy rules of the Commission and the CAISO and provides local capacity reliability.

25. SDG&E's net market value for all six of the awarded contracts is positive.

26. The six awarded contracts conform with the safety requirements developed by SDG&E.

27. The six awarded contracts all provide local reliability capacity.

28. The prices and terms of the six awarded contracts are just, reasonable, and cost effective.

Conclusions of Law

1. The third-party power purchase and tolling energy storage agreements totaling 13.5 megawatts of capacity between SDG&E and Enel Green Power North America, Advanced Microgrid Solutions, and Powin Energy should be approved.

2. The two utility owned energy storage contracts totaling 70 MW of capacity between SDG&E and AES (the Fallbrook BESS) and RES Americas Construction (the Miramar BESS) should be approved.

3. The Demand Response contract totaling 4.5 MW of capacity between SDG&E and OhmConnect should be approved.

4. SDG&E should be authorized to count the entirety of the 13.5 MW of third- party power purchase and tolling energy storage agreements approved in this decision towards its AB 2514 energy storage target as determined in D.13-10-040.

5. SDG&E should be authorized to count 30 MW from the Miramar BESS project and 8.85 MW from the Fallbrook BESS towards its AB 2514 energy storage target as determined in D.13-10-040.

6. Cost recovery for SDG&E of the five awarded energy storage contracts with Enel Green Power North America, Advanced Microgrid Solutions, and Powin Energy, RES Americas Construction, and AES should be granted.

7. Cost recovery for SDG&E of the demand response contract with OhmConnect, reduced by a pro rata share of the diminished contract term due to the proposed start of January 1, 2018 occurring prior to Commission approval of the contract, should be granted.

8. SDG&E's requested cost recovery approaches for the utility-owned storage and third party storage resources with cost allocation mechanism treatment should be approved.

9. The cost recovery approach for the demand response contract through the Amortization for Advanced Metering and Demand Response Memorandum Account should be approved.

10. ORA's motions for leave to file under seal confidential versions of its Opening Brief and Reply Brief should be granted.

11. SDG&E's motion for leave to file under seal confidential versions of its Opening Brief should be granted.

O R D E R

IT IS ORDERED that:

1. The third-party power purchase and tolling energy storage agreements totaling 13.5 megawatts of capacity between San Diego Gas & Electric Company and Enel Green Power North America, Advanced Microgrid Solutions, and Powin Energy are approved.

2. The two utility owned energy storage contracts totaling 70 megawatts of capacity between San Diego Gas & Electric Company and AES Corporation (the Fallbrook Battery Energy Storage System) and RES Americas Construction (the Miramar Battery Energy Storage System) are approved.

3. The Demand Response contract totaling 4.5 megawatts of capacity between San Diego Gas & Electric Company and OhmConnect is approved.

4. San Diego Gas & Electric Company is authorized to count the entirety of the 13.5 megawatts of third party power purchase and tolling energy storage agreements approved in this decision towards its Assembly Bill 2514 energy storage target as determined in Decision 13-10-040.

5. San Diego Gas & Electric Company is authorized to count 30 megawatts from the Miramar Battery Energy Storage System project and 8.85 megawatts from the Fallbrook Battery Energy Storage System towards its Assembly Bill 2514 energy storage target as determined in Decision 13-10-040.

6. Cost recovery for San Diego Gas & Electric of the five awarded energy storage contracts with Enel Green Power North America, Advanced Microgrid Solutions, and Powin Energy, RES Americas Construction, and AES Corporation is granted.

7. Cost recovery for San Diego Gas & Electric Company of the demand response contract with OhmConnect, reduced by a pro rata share of the diminished contract term due to the proposed start of January 1, 2018 occurring prior to Commission approval of the contract, is granted.

8. San Diego Gas & Electric Company's requested cost recovery approaches for the utility-owned storage and third party storage resources with cost allocation mechanism treatment are approved.

9. The cost recovery approach for the demand response contract through the Amortization for Advanced Metering and Demand Response Memorandum Account is approved.

10. The Office of Ratepayer Advocates' motions for leave to file under seal confidential versions of its Opening Brief and Reply Brief are granted.

11. San Diego Gas & Electric Company's motion for leave to file under seal confidential versions of its Opening Brief is granted.

12. Application 17-04-017 is closed.

This order is effective today.

Dated May 31, 2018, at San Francisco, California.

MICHAEL PICKER

President

CARLA J. PETERMAN

LIANE M. RANDOLPH

MARTHA GUZMAN ACEVES

CLIFFORD RECHTSCHAFFEN

Commissioners